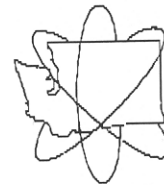




TELECOPY TRANSMITTAL



P.1/2

DIVISION OF  
RADIATION  
PROTECTION

FROM THE

DIVISION OF RADIATION PROTECTION

DATE: 8/4/03

NUMBER OF PAGES: COVER + 1

Please Deliver to: JULIE SILOTTI

From: JAMIL AHMAD (360) 236-3242

Instructions:

Information about the Richland Commercial  
LLRW facility

This message may be confidential. If you received it by mistake, please notify the sender and return the item. All messages to and from the Department of Health may be disclosed to the public.

OUR TELECOPIER NUMBERS ARE:  
OLYMPIA: (360) 236-2255

RICHLAND: (509) 377-3871  
SPOKANE: (509) 456-2997

TO: Bill Sinclair/ Julie Silotti  
Department of Radiation Protection  
State of Utah, Utah

August 4, 2003

Enclosed, please find the information you requested in regard to the **commercial Low- Level Radioactive Waste (LLRW) Facility** located in the state of Washington.

**Operator:** US Ecology, Inc. (Phone: (509) 377-2411)

**Location:** Approximately 23 miles northwest of Richland, WA.

It occupies 100 acres within the U.S. DOE Hanford site (approx. 560 sq. miles)

**Age of Site:** June 1965

**Trenches:** Approx. 800 ft. long, 150 ft. wide, and 45 ft deep. (Earlier trenches were smaller)

**Construction:** Conventional shallow- land burial of packaged waste into unlined trenches.

**Structures:** The LLRW facility has 4 buildings (metal and wood construction).

These buildings serve as offices for US Ecology and the State of Washington staff.

**Rainfall:** Average of 6 inches /year

**Groundwater Levels:** Average depth to groundwater is 315 ft.

**Soil Composition:** The surface soils are 10 to 20 ft deep consisting of **sandy loam and silty sands**.

These soils have low water- holding capacity due to low organic matter and clay content.

The upper 50 to 100 ft. consists of fine sand to silt (un-cemented) with zones of volcanic ash.

**Site Characteristic:** Characterized by thick basaltic lava flows overlain by unconsolidated sediments varying in thickness and texture. The "Hanford Formation" is about 250 feet thick beneath the LLRW site and consists of alternating layers of silt, fine sand, ad medium to coarse sand over poorly sorted sands, silts, and gravels.

**Waste Types accepted:** Class A, B, and C and NARM (naturally occurring and accelerator produced)

Prior to 1985, the facility accepted non-radioactive hazardous, and mixed wastes.

**Release (if any):** Ground water contamination, from past U.S.DOE activities on the central plateau; radionuclides contaminating the groundwater include H-3, Co-60, Sr-90, Tc-99, I-129, Cs-137, and uranium and plutonium isotopes. Several of these plumes are expanding and moving towards the commercial LLRW disposal site. U.S. DOE is in the process of remediating the contaminated site at Hanford. No orders for remedial actions apply to the commercial LLRW disposal site at this time.

**Damage to the Environment:** No significant damage observed from operation of the LLRWF.

#### Miscellaneous:

The commercial LLRW disposal site is located in area known as the "central plateau". The central plateau is an area of intensive waste management activities associated with U.S. government nuclear program dating back to 1940's. These areas contain several large underground tank farms, storage facilities and land disposal facilities.

Columbia River (approx. 17 miles east) is the nearest surface water body.

Access to the LLRWF is restricted and there are no permanent residences on or adjacent to the site.

No domestic or municipal wells on site or within several miles of the facility.

S. Jamil Ahmad *JA*  
Division of Radiation Protection  
State of Washington, Olympia, WA.

PH (360) 236-3242